

PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Ging Hauw KHOE, Myint ZAW, Patricia Salini

PRASAD and Maree Therese EMETT

Serial no.

For

PHOTO-ASSISTED OXIDATION OF INORGANIC

SPECIES IN AQUEOUS SOLUTIONS

Docket

**GRIHAC P28AUS** 

## **BOX PCT**

The Commissioner of Patents and Trademarks Washington, D.C. 20231

## PRELIMINARY AMENDMENT

Dear Sir:

By way of preliminary amendment, please amend the above identified application as set forth below.

## In the Claims:

Please cancel original claims 1-9, without prejudice or disclaimer of the subject matter therein, in favor of new claims 10-17 as follows.

- 10. A method for oxidizing an inorganic species in an aqueous solution comprising the steps of:
  - (i) supplying an oxidizable source of sulphur, and oxygen to the solution; and
  - (ii) irradiating the solution with UV light such that the species is oxidized.
- 11. The method as claimed in claim 10, wherein the oxidizable source of sulphur is  $SO_3^{2-}$ ,  $SO_2(g)$ , aqueous  $SO_2$ ,  $HSO_3^{-}$ ,  $S_2O_3^{2-}$ ,  $S_4O_6^{2-}$ .
  - 12. The method as claimed in claim 10, wherein the inorganic species is present in the aqueous solution in trace quantities.
- The method as claimed in claim 10, wherein the inorganic species is arsenic manganese, cerium, and/or iron.
  - 14. The method as claimed in claim 10, wherein the wavelength of UV light is less than 300 nm.

